

## ABSTRACT OF THE DISCLOSURE

A system and method that can ensure the security of electronic-mail on the Internet regardless of whether security capabilities are present on the client side, in which a proxy server (4) is arranged between the Internet (5) and a mail server (2) on a LAN (1) and in which a mail server (2) that has received ordinary-text mail from the mail client (3) sends mail that is addressed to a destination outside the LAN to the proxy server (4) as unaltered ordinary text, and proxy server (4): encrypts the ordinary-text mail, attaches the signature of the mail originator, and transmits the encrypted mail with attached signature to the Internet (5), checks for falsification of encrypted mail with attached signature from the Internet, decrypts the encrypted mail and sends as ordinary-text mail to the mail server (2) if the mail has not been falsified, and denies reception of mail if the mail has been falsified to prevent entry of falsified mail into LAN (1).